

SAF-RC-040
300 Area D&D Waste Characterization
Sampling - Other Solid
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Renee Nielson L1-01

KW 6/26/07
INITIAL/DATE

COMMENTS:

SDG 07-A-3304

SAF-RC-040

Rad only

Chem only

Rad & Chem

Complete

Partial

Sample Location/Waste Site: 321 Steam Lines

RECEIVED
JUL 10 2007

EDMC



6/26/07
Page 1 of 5

SUBMITTED TO:

Joan Kessner
Washington Closure Hanford
2620 Fermi Avenue, MSIN H4-21
Richland, WA 99354



REFERENCE DATA:

Client Sample No.:	J155R3 through J155V1
P.O. No.:	Not Available
Sample Location:	321 Steam Lines
Sample Type:	Bulk
Method Reference:	EPA-600/R-93/116
DCL Set ID No.:	07-A-3304
DCL Sample ID No.:	07-18825 through 07-18840
Sample Receipt Date:	6/19/07
Analysis Date:	6/25/07 through 6/26/07

We certify that the following samples were prepared and analyzed by Polarized Light Microscopy for asbestos and other fibrous constituents using EPA-600/R-93/116. The samples were acceptable upon receipt except where noted. The samples were examined under a stereomicroscope in a laboratory fume hood for general composition and phase separation. If needed, portions of the sample were removed and ground with a mortar and pestle before being mounted on a glass microscope slide. Mountings of representative portions of the material are prepared in one or more appropriate refractive index liquids (1.550, 1.605, 1.680) and examined by Polarized Light Microscopy*. Estimates of concentration are made on an area basis. The results of the analysis apply only to the materials analyzed and are summarized on the attached bulk asbestos analysis data sheets. DataChem Laboratories will dispose of all bulk samples after 60 days unless other arrangements are made.


Shawn Smythe
Analyst


Anna Marie Ristich
Reviewer

*Floor tiles, decorative paints, joint compounds, and cement materials require additional treatment in order to evaluate the concentration of small asbestos fibers bound in the material. Some samples may contain fibers that are not visible by PLM and can only be detected by electron microscopy techniques. Floor tiles are analyzed as homogeneous materials if insufficient mastic is present or if phases have been cross contaminated.

DataChem Laboratories NVLAP Lab ID: 101917. Laboratory accreditation by the National Institute of Standards and Technology does not in any way constitute approval or endorsement by NVLAP, NIST, or any agency of the federal government.

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4388 GLENDALE-MILFORD ROAD
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NOVATO, CALIFORNIA 94945
800 280-8071, FAX 415 893-9469

6/26/07

**DataChem Laboratories
Polarized Light Microscopy
Asbestos Analytical Report**

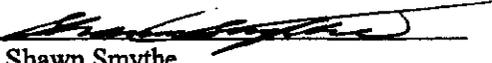
Client: Washington Closure Hanford
Location: 321 Steam Lines
Set ID: 07-A-3304

Client Sample ID:	J155R3	J155R4	J155R5	J155R9	J155T0
DCL Sample ID:	07-18825	07-18826	07-18827	07-18828	07-18829
Macroscopic Examination					
Accepted/Rejected:	Accepted	Rejected	Accepted	Accepted	Accepted
Homogeneity:	Homog.		Homog.	Homog.	Homog.
Color:	Grey		Grey	Grey	Grey
Texture:	Pwdry/Fbrs		Pwdry/Fbrs	Pwdry/Fbrs	Pwdry/Fbrs
Description:	Material		Material	Material	Material
Analysis:	PLM		PLM	PLM	PLM
Asbestiform Minerals					
% Chrysotile:	>5 ≤ 10		>5 ≤ 10	>5 ≤ 10	>5 ≤ 10
% Amosite:	>10 ≤ 20		>10 ≤ 20	>10 ≤ 20	>10 ≤ 20
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:	>15 ≤ 30		>15 ≤ 30	>15 ≤ 30	>15 ≤ 30
Other Materials					
% Cellulose:					
% Fiberglass:					
% Other Fibers:				>3 ≤ 5	
% Resin/Binder:					
% Non Fibrous:	>60 ≤ 70		>60 ≤ 70	>60 ≤ 70	>60 ≤ 70

ND = None Detected Trace = <1%

Special Prep Procedures: None.

*Notes: P. O. #: Not Available. Sample number J155R4 was rejected due to insufficient amount of material for analysis. Sample container submitted did not contain any material.


Shawn Smythe
Microscopist

All values are in area percent by visual estimate. The Federal Register Vol. 55 No. 224 Tuesday Nov. 20 1990 Rules and Regulations states "... If the asbestos content is estimated to be less than 10% by a method other than point counting,... (the analysis) be repeated using the point counting technique by PLM." Any of the above samples can be reanalyzed by point counting at the client's request. Wherever possible, separate phases are analyzed and reported individually.

6/26/07

**DataChem Laboratories
Polarized Light Microscopy
Asbestos Analytical Report**

Client: Washington Closure Hanford
Location: 321 Steam Lines
Set ID: 07-A-3304

Client Sample ID:	J155T1	J155T2	J155T3	J155T4	J155T5
DCL Sample ID:	07-18830	07-18831	07-18832	07-18833	07-18834
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Homog.	Homog.	Homog.	Homog.	Homog.
Color:	Grey/Black	Grey	Grey	Grey	Grey
Texture:	Pwdry/Resn/Fbrs	Fbrs/Pwdry	Fbrs/Pwdry	Fbrs/Pwdry	Pwdry/Fbrs
Description:	Material	Material	Material	Material	Material
Analysis:	PLM	PLM	PLM	PLM	PLM
Asbestiform Minerals					
% Chrysotile:	>10 ≤ 20				>5 ≤ 10
% Amosite:	>3 ≤ 5	>50 ≤ 60	>50 ≤ 60	>50 ≤ 60	>10 ≤ 20
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:	>13 ≤ 25	>50 ≤ 60	>50 ≤ 60	>50 ≤ 60	>15 ≤ 30
Other Materials					
% Cellulose:					
% Fiberglass:					
% Other Fibers:			>1 ≤ 3		
% Resin/Binder:	>20 ≤ 30				
% Non Fibrous:	>40 ≤ 50	>30 ≤ 40	>30 ≤ 40	>30 ≤ 40	>60 ≤ 70

ND = None Detected Trace = <1%

Special Prep Procedures: None.

*Notes: P. O. #: Not Available.


Shawn Smythe
Microscopist

All values are in area percent by visual estimate. The Federal Register Vol. 55 No. 224 Tuesday Nov. 20 1990 Rules and Regulations states "... If the asbestos content is estimated to be less than 10% by a method other than point counting,... (the analysis) be repeated using the point counting technique by PLM." Any of the above samples can be reanalyzed by point counting at the client's request. Wherever possible, separate phases are analyzed and reported individually.

6/26/07

**DataChem Laboratories
Polarized Light Microscopy
Asbestos Analytical Report**

Client: Washington Closure Hanford
Location: 321 Steam Lines
Set ID: 07-A-3304

Client Sample ID:	J155T6	J155T7	J155T8	J155T9	J155V0
DCL Sample ID:	07-18835	07-18836	07-18837	07-18838	07-18839
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Homog.	Homog.	Homog.	Homog.	Homog.
Color:	Grey	Grey	Grey	Grey	Grey
Texture:	Pwdry/Fbrs	Pwdry/Fbrs	Crumbly	Pwdry/Fbrs	Pwdry/Fbrs
Description:	Material	Material	Material	Material	Material
Analysis:	PLM	PLM	PLM	PLM	PLM
Asbestiform Minerals					
% Chrysotile:	>5 ≤ 10	>5 ≤ 10		>5 ≤ 10	>5 ≤ 10
% Amosite:	>10 ≤ 20	>10 ≤ 20		>10 ≤ 20	>10 ≤ 20
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:	>15 ≤ 30	>15 ≤ 30	ND	>15 ≤ 30	>15 ≤ 30
Other Materials					
% Cellulose:					
% Fiberglass:			>3 ≤ 5		
% Other Fibers:					
% Resin/Binder:					
% Non Fibrous:	>60 ≤ 70	>60 ≤ 70	>90 ≤ 100	>60 ≤ 70	>60 ≤ 70

ND = None Detected Trace = <1%

Special Prep Procedures: None.

*Notes: P. O. #: Not Available.


Shawn Smythe
Microscopist

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6/26/07

**DataChem Laboratories
Polarized Light Microscopy
Asbestos Analytical Report**

Client: Washington Closure Hanford
Location: 321 Steam Lines
Set ID: 07-A-3304

Client Sample ID:	J155V1
DCL Sample ID:	07-18840

Macroscopic Examination

Accepted/Rejected:	Accepted
Homogeneity:	Homog.
Color:	Grey
Texture:	Pwdry/Fbrs
Description:	Material
Analysis:	PLM

Asbestiform Minerals

% Chrysotile:	>5 ≤ 10
% Amosite:	>10 ≤ 20
% Crocidolite:	
% Tremolite - Actinolite:	
% Anthophyllite:	
% Total Asbestos:	>15 ≤ 30

Other Materials

% Cellulose:	
% Fiberglass:	
% Other Fibers:	
% Resin/Binder:	
% Non Fibrous:	>60 ≤ 70

ND = None Detected Trace = <1%

Special Prep Procedures: None.

*Notes: P. O. #: Not Available.


Shawn Smythe
Microscopist

All values are in area percent by visual estimate. The Federal Register Vol. 55 No. 224 Tuesday Nov. 20 1990 Rules and Regulations states "... If the asbestos content is estimated to be less than 10% by a method other than point counting,... (the analysis) be repeated using the point counting technique by PLM." Any of the above samples can be reanalyzed by point counting at the client's request. Wherever possible, separate phases are analyzed and reported individually.

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-040-307	Page 1 of 6		
Collector Mike Stankovich		Company Contact Rence Nielson		Telephone No. 430-5466		Project Coordinator KESSNER, JH	Price Code 9K	Data Turnaround 7 Days	
Project Designation 300 Area D&D Waste Characterization Sampling - Other Soli		Sampling Location 321 Steam Lines		SAF No. RC-040					
Ice Chest No. <i>MED</i> <i>300-1807 Small FED EX BOX</i>		Field Logbook No. EL-1518-8		COA See below		Method of Shipment Fed Ex			
Shipped To DataChem Laboratories - Cincinnati		Offsite Property No. <i>NA 61807 A070299</i>		Bill of Lading/Air Bill No. <i>NA 707807 See OPR</i>					
POSSIBLE SAMPLE HAZARDS/REMARKS <i>Asbestos</i> <i>07-A-3304</i>		Preservation	None						
Special Handling and/or Storage		Type of Container	GP						
		No. of Container(s)	1						
		Volume	5g						
SAMPLE ANALYSIS			Asbestos-BULK-EPA						
Sample No. <i>07-</i>	Matrix *	Sample Date	Sample Time						
J155R3	<i>8825</i>	OTHER SOLID	<i>6/13/07</i>	<i>1230</i>	<i>X</i>				
J155R4	<i>8826</i>	OTHER SOLID		<i>1235</i>	<i>X</i>				
J155R5	<i>8827</i>	OTHER SOLID		<i>1240</i>	<i>X</i>				
J155R9	<i>18828</i>	OTHER SOLID		<i>1245</i>	<i>X</i>				
J155T0	<i>18829</i>	OTHER SOLID		<i>1250</i>	<i>X</i>				
CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS				Matrix *	
Relinquished By/Removed From <i>M Stankovich</i>		Date/Time <i>6/13/07 1500</i>		Received By/Stored In <i>3728/3A</i>		Date/Time <i>6/13/07 1500</i>		Laboratory Analysis, Data Management, and Shipping COA - RD4MXX2F00 Sampling COA - R3746A0 1300 Sampler unavailable to relinquish samples from 3728 Ref # <i>3A</i> . 3728 Custodian removed samples for shipping on <i>6/13/07</i> .	S=Soil SE=Settlement SO=Solid SI=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other
Relinquished By/Removed From <i>5728/3A</i>		Date/Time <i>6-18-07 1000</i>		Received By/Stored In <i>M Stankovich</i>		Date/Time <i>6-18-07 1000</i>			
Relinquished By/Removed From <i>M Stankovich</i>		Date/Time <i>6-18-07 1500</i>		Received By/Stored In <i>FED EX</i>		Date/Time			
Relinquished By/Removed From <i>J Korrell</i>		Date/Time <i>6/19/07 1034</i>		Received By/Stored In <i>J Korrell</i>		Date/Time <i>6/19/07 1034</i>			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
LABORATORY SECTION	Received By <i>J Korrell</i>	Disposal Method	Title				Date/Time <i>6/19/07 1034</i>		
FINAL SAMPLE DISPOSITION				Disposed By			Date/Time		

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-040-307	Page 2 of 6																																								
Collector Mike Stankovich		Company Contact Renee Nielson		Telephone No. 430-5466		Project Coordinator KESSNER, JH																																									
Project Designation 300 Area D&D Waste Characterization Sampling - Other Soli		Sampling Location 321 Steam Lines		SAF No. RC-040		Price Code 9K Data Turnaround 7 Days																																									
Ice Chest No. MED FED EX MED FED 1 BX		Field Logbook No. EL-1518-8		COA See below		Method of Shipment Fed Ex																																									
Shipped To 06-18-07 DataChem Laboratories - Cincinnati		Offsite Property No. NA 8-6-07 A070279		Bill of Lading/Air Bill No. NA 8-6-18-07 See O5PC																																											
POSSIBLE SAMPLE HAZARDS/REMARKS Asbestos 3304		Special Handling and/or Storage		<table border="1"> <tr><td>Preservation</td><td>None</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>Type of Container</td><td>G/P</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>No. of Container(s)</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>Volume</td><td>5g</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td>Asbestos-BULK-EPA</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>				Preservation	None							Type of Container	G/P							No. of Container(s)	1							Volume	5g								Asbestos-BULK-EPA						
Preservation	None																																														
Type of Container	G/P																																														
No. of Container(s)	1																																														
Volume	5g																																														
	Asbestos-BULK-EPA																																														
SAMPLE ANALYSIS																																															
Sample No.	Matrix *	Sample Date	Sample Time																																												
J155T1	8830 OTHER SOLID	6/13/07	1255	X																																											
J155T2	8831 OTHER SOLID		1300	X																																											
J155T3	8832 OTHER SOLID		1305	X																																											
J155T4	8833 OTHER SOLID		1310	X																																											
J155T5	8834 OTHER SOLID		1315	X																																											
CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS				Matrix *																																							
Relinquished By/Removed From <i>Mike Stankovich</i> 6/13/07 1500		Received By/Stored In <i>3728/30</i> 6/13/07 1500		Laboratory Analysis, Data Management, and Shipping COA - RD4MXX2F00 Sampling COA - R3746A0 1300 Sampler unavailable to relinquish samples from 3728 Ref # 3A. 3728 Custodian removed samples for shipping on 6/18/07.				S=Soil SE=Sediment SO=Solid SL=Sludge W = Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other																																							
Relinquished By/Removed From <i>3728/3A</i> 6-18-07 1000		Received By/Stored In <i>Mike Stankovich</i> 6-18-07 1000																																													
Relinquished By/Removed From <i>Mike Stankovich</i> 6-18-07 1004 1500		Received By/Stored In <i>FED EX</i>																																													
Relinquished By/Removed From		Received By/Stored In <i>DORELL</i> 6/19/07 1034																																													
Relinquished By/Removed From		Received By/Stored In																																													
Relinquished By/Removed From		Received By/Stored In																																													
LABORATORY SECTION	Received By <i>DORELL</i>		Title		Date/Time 6/19/07 1034																																										
FINAL SAMPLE DISPOSITION	Disposal Method		Disposed By		Date/Time																																										

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-040-307	Page 2 of 6
Collector Mike Stankovich		Company Contact Renee Nielson		Telephone No. 430-5466		Project Coordinator KESSNER, JH	
Project Designation 300 Area D&D Waste Characterization Sampling - Other Solid		Sampling Location 321 Steam Lines		SAF No. RC-040		Price Code 9K Data Turnaround 7 Days	
Ice Chest No. <i>MED FED EX BOX</i>		Field Logbook No. EL-1518-8		COA See below		Method of Shipment Fed Ex	
Shipped To DataChem Laboratories - Cincinnati		Offsite Property No. <i>361807 A070299</i>		Bill of Lading/Air Bill No. <i>361807 Sea OSA</i>			
POSSIBLE SAMPLE HAZARDS/REMARKS <i>Asbestos</i>		Preservation None		Type of Container G/P		No. of Container(s) 1	
Special Handling and/or Storage <i>3304</i>		Volume 5g		Asbestos-BULK-EPA			
SAMPLE ANALYSIS							
Sample No.	Matrix *	Sample Date	Sample Time				
J155T6	8835 OTHER SOLID	6/13/07	1320	X			
J155T7	8836 OTHER SOLID	↓	1325	X			
J155T8	8837 OTHER SOLID		1330	X			
J155T9	8838 OTHER SOLID		1415	X			
J155V0	8839 OTHER SOLID		1420	X			
CHAIN OF POSSESSION			Sign/Print Names		SPECIAL INSTRUCTIONS		
Relinquished By/Removed From <i>Mike Stankovich</i>		Date/Time 6/13/07 1500		Received By/Stored In <i>3728/SA</i>		Date/Time 6/13/07 1500	
Relinquished By/Removed From <i>3728/SA</i>		Date/Time 6-18-07 1000		Received By/Stored In <i>Mike Stankovich</i>		Date/Time 6-18-07 1000	
Relinquished By/Removed From <i>Mike Stankovich</i>		Date/Time 6-18-07 1500		Received By/Stored In <i>FED EX</i>		Date/Time	
Relinquished By/Removed From		Date/Time		Received By/Stored In <i>Roller</i>		Date/Time 6/19/07 1034	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time	
LABORATORY SECTION	Received By <i>Roller</i>	Title		SPECIAL INSTRUCTIONS Laboratory Analysis, Data Management, and Shipping COA - RD4MXX2F00 Sampling COA - R3746A0 1300			
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By		Date/Time 6/19/07 1034			

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-040-307		Page 4 of 6	
Collector Mike Stankovich		Company Contact Renee Nielson		Telephone No. 430-5466		Project Coordinator KESSNER, JH		Price Code 9K Data Turnaround 7 Days	
Project Designation 300 Area D&D Waste Characterization Sampling - Other Soli		Sampling Location 321 Steam Lines		SAF No. RC-040					
Ice Chest No. FED MED EX BOX		Field Logbook No. EL-1518-8		COA See below		Method of Shipment Fed Ex			
Shipped To DataChem Laboratories - Cincinnati		Offsite Property No. NA 6-19-07		A070299		Bill of Lading/Air Bill No. NA 6-18-07			
POSSIBLE SAMPLE HAZARDS/REMARKS Asbestos		Preservation		None					
Special Handling and/or Storage 3304		Type of Container		G/P					
		No. of Container(s)		1					
		Volume		5g					
SAMPLE ANALYSIS		Asbestos-BULK-EPA							
Sample No.	Matrix *	Sample Date	Sample Time						
J155V1	8840 OTHER SOLID	6/13/07	1425	X					
J155V2	OTHER SOLID								
J155V3	OTHER SOLID								
J155V4	OTHER SOLID								
J155V5	OTHER SOLID								
CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS				Matrix *	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time		Laboratory Analysis, Data Management, and Shipping COA - RD4MXX2F00 Sampling COA - R3746A0 1300 Sampler unavailable to relinquish samples from 3728 Ref # 3A. 3728 Custodian removed samples for shipping on 6/18/07.	
MS Stankovich		6/13/07 1500		3728/3A		6/13/07 1500			
3728/3A		6-18-07 1000		MS Stankovich		6-18-07 1000			
MS Stankovich		6-18-07 1500		FED EX		6/19/07 1034			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time		S=Soil SE=Settlement SO=Solid SL=Sludge W=Water O=Oil A=Air DS=Dryum Solids DL=Dryum Liquids T=Time W=Wipe L=Liquid V=Vegetation X=Other	
LABORATORY SECTION		Received By		Title		Date/Time			
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time			